Trauma 2015: California's Future

Retriage: the missing piece

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Jay Goldman, MD, FACEP
John Steele, MD, FACS

Regional Network Development and Re-triage workgroup members

Name	Organization	Email	Contact Numbers	LEMSA	RTCC	STAC
Christy Frescoln, RN	Trauma Program Manager, Kaiser South Sacramento	Christy.A.Frescoln@kp.org	916) 688 2686	Sacramento	North	
Jay Goldman, MD **CO-CHAIR**	Kaiser Foundation Health Plans and Hospitals	Jay.goldman@kp.org	(510) 987-1819	Alameda	Bay Area	Yes
Lynn Henckel RN	Trauma Program Manager, Marin General Hospital	Henckel@MarinGeneral.Org	(415) 925-7256 (W) (415) 246-7997(C)	Marin	Bay Area	
Rick Kline, MD	Trauma Director, Regional Medical Center (San Jose)	Richard.kline@hcahealthcare.com	(408) 272-6467 (W) (408) 313-4926 (C)	Santa Clara	Bay Area	Yes
Tracy Leet, RN	Trauma Coordinator, San Francisco EMS Agency	Tracy.leet@sfdph.org	(415) 487-5033	San Francisco	Bay Area	
Farid Nasr, MD	EMSA	Farid.nasr@emsa.ca.gov	916) 431 3686			Yes
Chris Newton, MD	Surgeon, Oakland Children's Hospital	cnewton@mail.cho.org	(510) 428-3823 (W)	Alameda	Bay Area	Yes
Sharon Perry, RN	Trauma Program Manager, Memorial Medical Center (Modesto)	Perrys2@sutterhealth.org	(209) 569-7361 (W) (209) 402-4643	Mountain Valley	Central	
Christy Preston, RN	Trauma System Manager, Los Angeles County EMS Agency	cpreston@dhs.lacounty.gov	(562) 347- 1660 (W) (909) 720-6570 (C)	Los Angeles	South West	
Kirk Schmitt	Director, Monterey County EMS Agency	schmittke@co.monterey.ca.us	(831) 755-4964 (W)	Monterey	Bay Area	
John Steele, MD **CO-CHAIR**	Trauma Director, Palomar Medical Center	JSteele288@aol.com	(760) 737-3513	San Diego	South East	Yes
Ewen Wang, MD	Pediatric Emergency Medicine, Stanford University Medical Center	Ewen@stanford.edu	(650) 723-0757 (W)	Santa Clara	Bay Area	
Ron Willson	Paramedic Coordinator CHP Office of Air Operations	rawillson@chp.ca.gov	(916) 843-3303	State	North	
Jennifer Wolag, RN	Trauma Program Manager, Santa Barbara Cottage Hospital	jwolag@sbch.org	(805) 569-7575 (W) (805) 890-5551 (C)	Santa Barbara	South West	
Joseph Galante, MD	Trauma Medical Director UCSMC	Joseph.galante@ucdmc.ucdavis.edu	(916) 734 3246 (W)	Sacramento		
Robert Mackersie, MD	Trauma Medical Director San Francisco General	rmackersie@sfghtrauma.ucsf.edu				Yes

What is retriage?

- A pre-arranged process and agreement between 3 parties: LEMSA, Trauma Center, non-TC Emergency Department
- The process addresses EMS undertriage, or dropoff by others, of a critically ill trauma patient to a non-TC ED, by *facilitating and permitting* immediate movement of the patient to the nearest TC at the discretion of the treating ED physician
- Patient is treated as a scene 911 patient and redirected from the non-TC ED to the TC

What retriage is not

- A mandate to transfer a patient that the non-TC ED feels they can handle
- A routine transfer effort using interfacility ambulances, a transfer center, finding an accepting physician and bed, and all the attendant delays
- A process for non-TC to "dump" a patient
- A process to subvert the intent of EMTALA

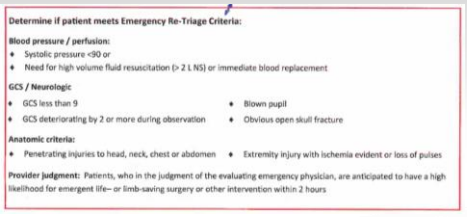
What retriage accomplishes

- Eliminates (or minimizes) need for non-TC ED to "shop" for accepting TC:
  - Each non-TC ED will have its pre-identified TC "buddy" for immediate retriage acceptance
  - TC will have agreed, in advance, to automatically accept all patients from "buddy" ED who have injuries listed in the "red box"
- Eliminates, for "red box" patients, negotiation between non-TC ED doctor and Trauma Surgeon re more workup or stabilization prior to immediate movement to the TC
- Speeds arrival of patient to definitive TC care, minimizes delays of arranging routine interfacility transfer
- EMTALA compliance

Basic requirements for retriage

- Agreement between TC (and its trauma surgeons) and LEMSA re injuries that belong in the "red box" and are thus eligible for automatic acceptance from non-TC ED to the TC
- Pre-arranged identification of each non-TC ED's TC "buddy" and education of the "buddy" re management of "red box" patients
- A simple, single call referral process for non-TC ED to inform buddy TC of "red box" patient en route
- 911 priority transport to TC
- Agreement to discuss retriage errors off-line in regular meetings between non-TC and TC
- Basically, this establishes a working relationship between the TC and its non-TC "buddies"

The "Red" box



Determine if patient meets Emergency Re-Triage Criteria:

Blood pressure / perfusion:
- Systolic pressure <90 or
- Need for high volume fluid resuscitation (> 2 L NS) or immediate blood replacement

GCS / Neurologic
- GCS less than 9
- Blown pupil
- GCS deteriorating by 2 or more during observation
- Obvious open skull fracture

Anatomic criteria:
- Penetrating injuries to head, neck, chest or abdomen
- Extremity injury with ischemia evident or loss of pulses

Provider judgment: Patients, who in the judgment of the evaluating emergency physician, are anticipated to have a high likelihood for emergent life– or limb-saving surgery or other intervention within 2 hours

CONTRA COSTA EMERGENCY TRAUMA RE-TRIAGE PROCEDURE—ADULT (AGE 15 AND OVER)

The "Red" Box-Peds

LEMSA requirements for retriage

- Development of policy or memo identifying those patients qualifying for this process
- Establishment of this process as local standard of care in the community, included as part of LEMSA trauma plan, submitted to EMSA for approval, and endorsed by County BOS
- Monitoring of TC compliance with process
- Assisting in education of non-TC personnel
- Education of regulatory surveyors (DHS, CMS) of community standard

Trauma Center requirements

- Agreement among all trauma surgeons on injuries in the "red box" and automatic acceptance
- Establishment of a simple, single call process for non-TC to inform of incoming patient
- Pre-identification of "buddy" non-TC EDs and periodic educational/case review/feedback meetings with non-TC ED staff
- Agreement to handle non-TC errors through educational and peer-review channels

Non-TC ED requirements

- Education of staff re "red box" patients and benefits of immediate retriage when appropriate
- Education of staff re steps to immediately retriage patient
- Education of staff re limits of retriage, especially their responsibility for patients whose injuries do not fall into the "red box"
- Willingness to partner with, provide meeting time to, and participating in process improvement efforts with their TC buddies
- Commitment to provide pre-TC data on retriage patients to TC as needed

Pt Scenario

- "Home boy dropoff" to non-trauma center with gsw left lower abdomen
- A-OK
- B-OK
- C-tachycardic with SBP 90/p
- D-GCS 15 but anxious
- E-Single gsw left lower abdomen with tenderness

Pt Scenario

- MCC at high rate of speed, unresponsive, difficult airway, TC 25 minutes away, NTC 5 min away
- To NTC where pt intubated with advanced techniques
- B-OK following intubation
- C-tachycardic with SBP 110
- D-GCS 3T with unequal pupils
- E-boggy scalp and clinical pelvic fracture

Pt Scenario

- 13 yo male involved in violent collision in a football game, helmeted, no LOC, neck pain with paresthesias and weakness, to LII adult center
- A-OK
- B-OK
- C-OK
- GCS 15, quadriparetic, hyper-reflexive
- E- OK

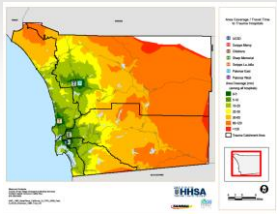
Short term goals for the workgroup

- Define the network, ie. identify the "buddies" in the buddy system
- Begin to develop guidelines for Re-triage and IFT
- Craft a template for Regional Cooperative Agreements (determine when agreements are not needed, such as immediate retriage)

Example: San Diego TC "Buddies"

- Palomar Medical Center
  - Pomerado Hospital, Palomar Med Center Downtown Campus
- UCSD
  - Scripps Mercy Chula Vista, Sharp Coronado Hosp, Naval Base Coronado, El Centro Regional Med Ctr, Pioneer Memorial Hospital, Yuma Regional Med Ctr
- Scripps Mercy
  - Alvarado Hospital, NMCSD, Paradise Vally Hospital, Sharp Chula Vista
- Sharp Memorial
  - Sharp Grossmont Hospital, Kaiser Permanente-Zion
- Scripps La Jolla
  - Tri City Med Ctr, UCSD-Thornton Hospital, Scripps Encinitas, Naval Hospital Camp Pendleton
- Rady Children's Hospital
  - Regional asset

A System of Systems



Time to TC